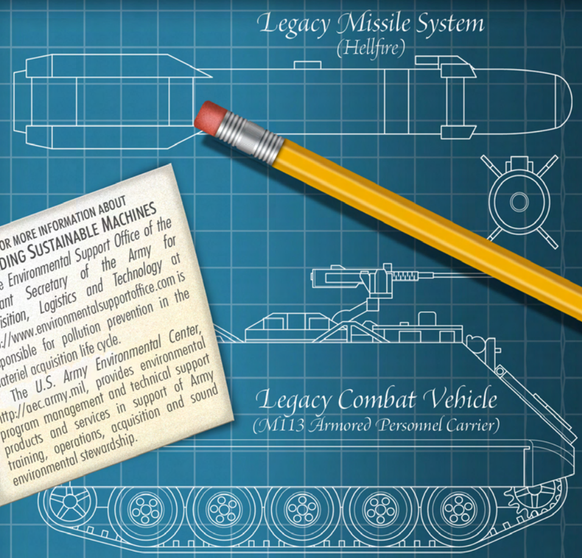
Building SUSTAINABLE Machines

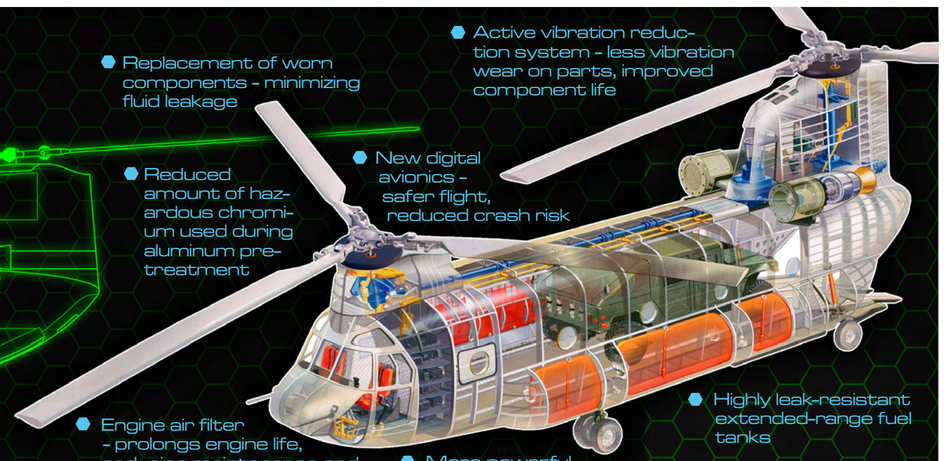
While the Army is developing its weapons to defend our nation in the 21st century, modern technology allows efficient designs that are more friendly to the environment as well as more lethal to our enemies. The impact of new weapons systems on Soldiers and the land where they train and work is now considered at every step of the life cycle of a weapon system, from concept to disposal.



FOR MORE INFORMATION ABOUT BUILDING SUSTAINABLE MACHINES
The Environmental Support Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology at http://www.environmentalsupportoffice.com is responsible for pollution prevention in the materiel acquisition life cycle.
The U.S. Army Environmental Center, http://aec.army.mil, provides environmental program management and technical support products and services in support of Army training, operations, acquisition and sound environmental stewardship.

CH-47 Chinook cargo helicopter

About 380 of these Army workhorses, first introduced in the early 1960s, will be completely remanufactured — including a new fuselage — over the next 17 years. Approximately 50 more will be built.

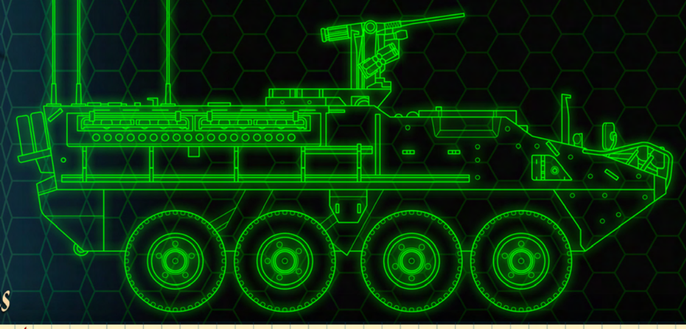


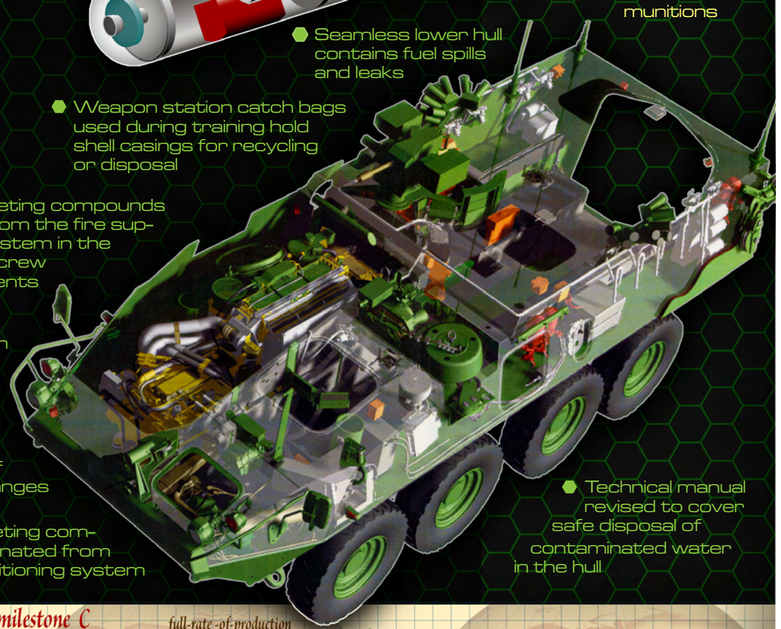
Joint Common Missile

The Joint Common Missile is an extended range, precision guided, air-to-surface weapon for use by joint service and allied manned and unmanned aircraft. About 49,000 will replace the Hellfire, TOW, and Maverick over the next two decades.

Stryker combat vehicle

The Stryker joined the Army inventory in 2002 and is already seeing action in Operation Iraqi Freedom. With more than 2,000 of the vehicles in 10 configurations on order, the light armored vehicle is changing the way the Army fights.





THE ARMY ACQUISITION LIFE CYCLE *Environmental considerations*

pre system acquisition

milestone A — authority to begin developing technology

milestone B — authority to begin developing & demonstrating the system

system acquisition

design readiness review

milestone C — authority to begin production & deployment

full-rate-of-production decision

sustainment

SYSTEM'S LIFE CYCLE PHASES & ACTIVITIES

concept refinement	technology development	system development and demonstration	production & deployment	operations & support	disposal
determining needs to be met	determining what meets Army needs	creating, testing, and refining			

ENVIRONMENTAL FOCUS ON SYSTEM'S LIFE CYCLE

- Environmental professionals review and comment on the capabilities and requirements for the new system.
- Environmental experts are part of the Integrated Product Team from the beginning.
- An environment, safety and occupational health evaluation for the program is required before system development and testing begins.
- The Army develops an Environmental Assessment and, if necessary, an Environmental Impact Statement for the entire program. These documents, required under the National Environmental Policy Act, are updated throughout the acquisition phase and finalized before full-rate production.
- Environmental specifications are written into design requirements presented to potential contractors who will turn the design into hardware.
- Environmental experts have a say in the contractor selection process and monitor the work for compliance with environmental standards.
- Technical manuals are validated for operation, repair and maintenance practices.
- Another program-wide environment, safety, and occupational health evaluation is done before the Army authorizes production.
- Safety and Suitability for Release Statement.
- Installations where the system will be used prepare their own site-specific Environmental Assessments, and if necessary, Environmental Impact Statements based on program-wide documents and local conditions.
- Units training with the system prepare Environmental Assessments and, if necessary, Environmental Impact Statements based on installation and program documents and their own needs.
- Disposal Environmental Assessment and Environmental Impact Statement.

IDENTIFY POTENTIAL CONSEQUENCES

DETERMINE CONSEQUENCES & DEVELOP MITIGATION MEASURES